

Investigations in the field ...

S/371/62/015/006/005/006  
E071/E492

initiators, intramolecular cyclisation takes place, followed by chain growth with the formation of linear, soluble polymers containing cyclohexane rings. The cyclic direction of the polymerisation reaction was confirmed by dehydrogenation of polydiallylacetic acid and oxidation of polydiallylcarbinol. Introduction of chlorine in the position 2,5-substituted heptadiene-1,6 strongly increases the velocity of polymerisation and, due to intramolecular cyclisation of the monomer, this is accompanied by a considerable dehydrochlorination of the polymer formed. There are 2 figures and 2 tables.

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR  
(Institute of Organic Chemistry AS ArmSSR)

SUBMITTED: July 12, 1962

Card 2/2

S/190/63/005/002/004/024  
B101/B102

**AUTHORS:** Matsoyan, S. G., Pogosyan, G. M., Skripnikova, R. K.,  
Mushegyan, A. V.

**TITLE:** Studies in cyclic polymerization and copolymerization.  
XI. Polymerization of substituted hepta-1,6-dienes in  
the presence of radical initiators

**PERIODICAL:** Vysokomolekulyarnyye soyedineniya, v. 5, no. 2, 1963,  
183-187 ✓

**TEXT:** Studies were made of 4,4-diacetyl-hepta-1,6-diene (I), 4-cyano-4-carbethoxy-hepta-1,6-diene (II), 4-cyano-4-carboxy-hepta-1,6-diene (III), 4-cyano-hepta-1,6-diene (IV), 2,6-dichloro-4,4-dicarbethoxy-hepta-1,6-diene (V), and 2,6-dichloro-4-carboxy-hepta-1,6-diene (VI) as to their suitability for cyclic polymerization in the presence of 2 mole% benzoyl peroxide or azoisobutyric dinitrile. When using benzoyl peroxide, the yields (%) and m.p. (°C) of the polymers were: I, 22.7, 65-67; II, 34, 76-84; III, 40.0, 270-300; IV, 9.4, 65-67; V, 79.6, thick mass; VI, 47.3, crosslinking at 280°C. With azoisobutyric dinitrile, the yields were  
Card 1/2

Studies in cyclic polymerization ...

S/190/63/005/002/004/024  
B101/B102

lower. The molecular weight was 7000 to 20,000, the intrinsic viscosity 0.05-0.15. All polymers were soluble in organic solvents, except that of V. Introduction of electron-acceptor groups into the hepta-1,6-diene in 2, 4, or 6 position makes thus the radical polymerization of hepta-1,6-diene possible, which was not achieved without substitution according to C. S. Marvel, J. K. Stille (J. Amer. Chem. Soc., 80, 1740, 1958). The IR spectra of the polymers revealed the almost complete absence of double bonds and showed the bands characteristic of substituted cyclohexane rings. Cyclization between C<sub>2</sub> and C<sub>7</sub> and linear cyclic polymerization are assumed.

In the 2,6-dichloro derivatives, HCl is split-off. When HCl was completely separated from the polymer of VI by aqueous alkali solution, a dark brown polymer formed, m.p. 202-205°C. The IR spectrum showed that cyclohexa-1,4-diene links formed in this reaction. There are 2 figures and 1 table.

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR (Institute of Organic Chemistry AS ArSSR)

SUBMITTED: July 25, 1961

Card 2/2

1337-63 EWP(3)/ERP(6)/EWT(4)/BDS RD 26-1/Pr-2 RM/WW/JW/MAY  
ACCESSION NR: AP3000707 B/0190/63/005/005/0771/0782

AUTHOR: Matsuyan, B. G.; Pogoyan, G. M.; Kiliaryan, M. A.

71  
70

TITLE: Graft polymerization and copolymerization studies. 12. Radical polymerization of branched trivinyl compounds

SOURCE: *Synteza i khimicheskaya tekhnologiya*, v. 3, no. 5, 1963, 777-782

TOPIC: graft polymerization, copolymerization, radical polymerization, trivinyl compounds, cyclization, triallylamine

ABSTRACT: Radical polymerization of triallylamine, triallylphosphate and triallylamine hydrobromide was conducted in glass ampules at 80C, in the presence of benzoyl peroxide and azobisisobutyronitrile. The obtained polymers varied as to softening temperature, solubility in various solvents, and the degree of residual monomer, the latter amounting to 3.6 to 5.5%. On the basis of chemical and infrared spectroscopic investigation the conclusion was reached that intramolecular cyclization occurs on polymerization and that the three double bonds of the monomers are involved, forming polymers with bridged bicyclic repeating units. In another series of similar experiments using triallylamine, triallylacetonide, triallylcarbinol and triallylcarbinol acetate, it was found that the maximum polymer yield on block polymerization amounted to only 20%, as against 46% in the first two 1/2

1 1337-81

ADVISORY ID: 25000707

... and that the residual degree of monomerization amounted to 22% of the original monomer. It was concluded that this polymerization does not involve complete cyclization, the likely pattern consisting in the cyclization of two monomer molecules and in a double cyclization of one. Orig. art. has: 4 formulas and 2 tables

Author: Prof. Dr. Kamil Al-Awadhi (Institute of Organic Chemistry, Faculty of Science, Baghdad)

Classification: SECRET

DATE REC: 17-2-67

EXCL: 00

NO DIS: 01

NO REF DOW: 007

OTHER: 005

Page 1/2

100(1)/100(1)/100(1)/100 100 100/100 100/100  
100(1)/100(1)/100(1)/100 100 100/100 100/100

68  
67

AUTHOR: Matsuyan, S. O.; Pogosyan, G. R.; Babagalyan, A. O.; Hushagyan, A. Y.

TITLE: Studies in cyclic polymerization and copolymerization. 13. Polymerization of N-substituted diallylamines

Journal of Polymer Science: Polymer Chemistry Edition, v. 5, no. 6, 1967, 254-260

Keywords: cyclic polymerization, cyclic copolymerization, N-substituted diallylamines, radical polymerization, piperidine rings

Abstract: Having shown in previous publications the effect of polar groups on the polymerization of substituted 1,6-hexanediamines, the authors devoted the present study to the ability of N-substituted diallylamines to undergo polymerization in relation to the nature of the substituents. It was expected that the introduction of polar groups at the nitrogen atom would confer electron acceptor properties to the latter and thus the N-substituted diallylamines to radical polymerization. Thus, the products of a number of polymers are obtained, such as N,N'-diallylacetamide, N,N'-diallylchloroacetamide, N,N'-diallylpropionamide, N,N'-diallylbenzamide, N,N'-diallylacetamide, methylallylcarbonate, and diallylcyanoamide. All of these polymers were fusible powdery substances, soluble in organic solvents, with a

000 46

... weight from 7,500 to 25,000. Analysis by infrared spectroscopy confirmed the presence of cyclic structures in the polymer chains, which proved to be pyridine rings. Orig. art. has: 3 formulas, 3 charts, and 1 table.

ASSOCIATION: Institut organicheskoy khimii AN SSSR (Institute of Organic Chemistry, Academy of Sciences USSR)

RECEIVED: 27 Nov 61

DATE ACQ: 01-21-62

ENCL: 03

NO COPY: 00

NO REF COPY: 00

OTHER: 006

Copy 2/2

MATSOYAN, S.G.; VOSKANYAN, M.G.; CHOLAKYAN, A.A.

Cyclic polymerization and copolymerization. Part 14: Cyclic copolymerization of aliphatic divinylacetals with vinyl acetate.  
Vysokom.soed. 5 no.7:1035-1041 J1 '63. (M. 16:9)

1. Institut organicheskoy khimii AN Armanyskoj SSR.  
(Vinyl compound polymers) (Vinyl acetate)

MATSOYAN, S.G.; AKOPYAN, L.M.

Cyclic polymerization and copolymerization. Part 15: Synthesis and study of the cyclic polymerization of methyl substituted divinylbenzals. Vysokom.sped. 5 no.9:1329-1333 S '63. (MIRA 17:1)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

MATSOYAN, S.G.; POGOSYAN, G.M.; SAAKYAN, A.A.

Cyclic polymerization and copolymerization. Part 16; Synthesis and study of the cyclic polymerization of divinyl-(2-alkoxy)benzals. Vysokom.soed. 5 no.9:1334-1338 S '63. (MIRA 17:1)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

3/17/65/016/001/002/002  
 2072/2136

**AUTHORS:** Matsuyan, S.G., and Akopyan, L.N.  
**TITLE:** Investigations in the region of cyclic polymerization and copolymerization. Communication 20. Synthesis and investigation of cyclic polymerization of divinyl-acetals of o-, m-, p-chlorobenzaldehydes, α-naphthol aldehyde and benzophenone divinylketal  
**PERIODICAL:** Akademiya nauk Armyanskoy SSR. Izvestiya. Khimicheskiye nauki. v.16, no.1, 1963, 51-58

**TEXT:** The monomers were synthesized as follows:



where: Ar - aromatic nucleus. The polymerization was conducted at 80-150 °C with benzoyl peroxide and dimethyl isobutyric acid (DAK)  
 Page 1/2

Investigations in the region of ...

8/27/63/016/001/002/003  
2075/E156

as catalysts. All polymers were powders (softening point 100-110°C) soluble in benzene, chloroform and dioxane and insoluble in petroleum ether. DAK was the most effective catalyst giving polymers with a higher yield (5-34%). Monoaromatic divinylacetals polymerize to a relatively low degree. The introduction of Cl into the benzene ring in the monomers lowers considerably the yield of polymer. The three isomeric divinylchlorobenzenes differ only a little in respect of the rate of polymerization, the p-isomer giving the highest rate. Molecular weights of the polymers range from 10,000 (for monoaromatic aldehydes) to 25,000. The polymerization is stated to proceed according to a cyclic mechanism.

There are 3 tables.

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR  
(Institute of Organic Chemistry, AS ArmSSR)

SUBMITTED: July 18, 1963

Card 1/3

MATSOYAN, S.G.; VOSKANYAN, M.G.

Cyclic polymerization and copolymerization. Report No.22:  
Cyclic polymerization capacity of aliphatic divinyl acetals.  
Izv. AN Arm SSR. Khim nauki 16 no.2:151-158 '63 (MIRA 17:8)

1. Institut organicheskoy khimii AN ArmSSR.

MATSOYAN, S.G.; SARKYAN, A. A.

Synthesis of aryl vinyl ethynyl alcohols. Izv. AN Arm. SSR.  
Khim. nauki 16 no. 2:159-161 '63 (MIRA 17:8)

1. Institut organicheskoy khimii AN Arm. SSR.

EPR/EMP(1)/EIP(O)/EIP(O)/EIP(O)/RDS/ABD/PS-4/2-4/25-4  
EM/MS

1-2884-67

ACCESSION NO: AP002636

3/0171/63/016/003/0217/0256

74  
72

AUTHOR: Avetyan, N. G.; Darbinyan, J. G.; Matsyan, S. G.

SYNOPSIS: Investigations in the area of anionic polymerization and copolymerization. Part 2. Study of the copolymerization of propenylisopropenylketone and vinyl-isobutenylketone with acrylonitrile, vinylidene chloride and 2-methyl-5-vinylpyridine.

SOURCE: AN AZESS. Izv. Khimicheskoye nauki, v. 16, no. 3, 1963, 247-256.

NOTE: anionic polymerization, copolymerization, propenylisopropenylketone, vinyl-isobutenylketone, acrylonitrile, vinylidene chloride, 2-methyl-5-vinylpyridine

ABSTRACT: The copolymerization of propenylisopropenylketone (PIK) and vinyl-isobutenylketone (VIK) with acrylonitrile (AN), vinylidene chloride (KHV) and 2-methyl-5-vinylpyridine (MVP) in the presence of benzoyl peroxide was investigated. The polarity ( $\rho$ ) and specific activity ( $Q$ ) of the monomers was determined, the copolymerization constants  $\gamma_{sub 1}$  and  $\gamma_{sub 2}$  were calculated and found to decrease in magnitude for the following pairs of monomers: VIK - AN greater than PIK - AN greater than VIK - MVP greater than PIK - MVP greater than PIK - KHV greater than VIK - KHV. The variance in the copolymerization of the monomers as affected by

Cont 1/2

I 12861-53

ACCESSION NO: APO002636

2

... and activity is discussed. In the copolymerization of substituted divinylketones with vinyl monomers, cyclization with the formation of cyclopentanone rings in the main chain of the copolymer takes place in addition to vinyl copolymerization: (PIK - KHV 60.5% cyclization; PIK - AN 21.5%). \*IR spectra of the copolymers were taken by A. V. Masbagan on the IRK - 14 instrument in paste and in mineral oil.\* Orig. art. has: 7 tables, 3 figures, 2 formulas.

ASSOCIATION: Institut organicheskoy khimii AN AzerbSSR (Institute of Organic Chemistry, AN AzerbSSR)

EXEMPTED: 04/28/63

DATE ACQ: 12/3/63

ENCL: 00

FORM CLASS: 00

NO REI SW: 001

OTHER: 001

MATSOYAN, S.G.; MORLYAN, N.M.

Cyclic polymerization and copolymerization. Report No.25:  
Structure of dimethylvinylethynylcardinol polymers and the  
mechanism of their formation. Izv.AN Arm.SSR. Khim nauki 16  
no.4:347-356 '63. (MIRA 16:9)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

MATSOYAN, S.G.; VOSKANYAN, M.G.; SAAKYAN, A.A.

Cyclic polymerization and copolymerization. Report No. 26:  
Cyclic polymerization of divinyl acetals under the effect  
of ionic catalysts. Izv. AN Arm. SSR. Khim. nauki 16 no.5:  
455-460 '63. (MIRA 17:1)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

WATS YAN, S.G.; MUR YAN, . . . .

By the polymerization of . . . . .  
radical polymer in the presence of . . . . .  
in solutions. . . . .  
(3)

1. Institut organo . . . . .

MATSOYAN, S.G.; SAAKYAN, A.A.

Condensation of enyne and dienyns hydrocarbons with formaldehyde.  
Zhur.ob.khim. 33 no.12:3795-3798 D '63. (MIRA 17:3)

KOCHARYAN, N.M.; MATSOYAN, S.G.; BARSAMYAN, S.T.; PIKALOVA, V.N.; TOLAP-  
CHYAN, L.S.; MORLYAN, N.M.

Dielectric loss, dielectric constant, and the effective dipole  
moment of polydimethylvinylethynylcarbinol. Dokl. AN Arm. SSR 37  
no.1:7-13 '63. (MIRA 16:11)

1. Tsentral'naya nauchno-issledovatel'skaya fiziko-tekhnicheskaya  
laboratoriya AN Armyanskoy SSR. 2. Chlen-korrespondent AN Armyans-  
koy SSR (for Kocharyan).

AVETYAN, M.G.; DARBINYAN, E.G.; SAAKYAN, A.I.'b.A.; KINOYAN, F.S.; MATSOYAN, S.G.

Cyclic polymerization and copolymerization. Part 17: Radical  
polymerization of substituted divinge ketones. Vysokom. soed.  
6 no.1:3-9 Ja'64. (MIRA 17:5)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

MATBOYAN, S.S., KALAN, N.M.

Cyclic polymerization and copolymerization. Part 1. Cationic  
polymerization of dimethyl vinyl ether and methyl vinyl ether.  
6 no. 5:945-951. 1964.

1. Institut khimicheskoy khimii i khimicheskoy fiziki.

ACCESSION NR: AP4020516

8/0171/64/017/001/0062/0068

AUTHOR: Matsuyan, S. G.; Pogosyan, G. M.; Zhamkochyan, G.A.

TITLE: Cyclic polymerization and copolymerization  
28. Synthesis and study of the cyclic polymerization of some N-substituted derivatives of diallyl- and dimethallylamine

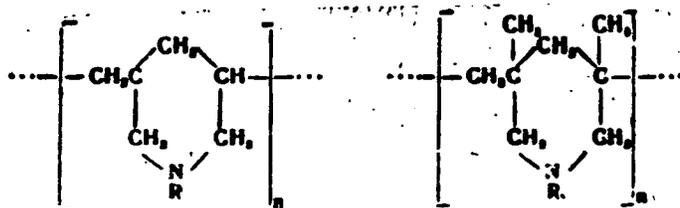
SOURCE: AN ArmSSR. Izv. Khimicheskiye nauki, v. 17, no. 1, 1964, 62-68

TOPIC TAGS: Cyclic polymerization, cyclic copolymerization, dimethallylamine, diallylamine derivative, diallylformamide, ethyl diallylcarbamate, nitrobenzamide derivative, phenylthiocarbamide derivative dimethallylcyanamide, dimethallylaceta-  
mide derivative, dimethallylcarbamate, dimethallylamine hydrochloride, tri-  
methallylamine hydrochloride

ABSTRACT: The polymerization of N-substituted derivatives of diallylamine, containing electron acceptor groups (CO, SO<sub>2</sub>, CN etc.) in nitrogen, in the presence of radical initiators are studied in order to determine the polymer properties. Synthesis and polymerization for a series of nitrogen-containing 1,6-dienes;

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ACCESSION NR: AF4020516



where R = HCO, CH<sub>3</sub>CO, C<sub>2</sub>H<sub>5</sub>OCO, CN etc.,

(diallylformamide, ethyl diallylcarbamate, N,N-diallyl-N-nitrobenzamide, N,N-diallyl-N-phenylthiocarbamide, dimethallyl-cyanamide, N,N-dimethallylacetamide, dimethallylcarbamate, and also dimethallylamine and trimethallylamine hydrochloride) were studied. The tendency to polymerize is much greater for the N-substituted derivatives of diallylamine than the corresponding N-substituted dimethallyl derivatives. The radical polymerization of monomers which were studied, occurs chiefly according to a cyclic mechanism with a formation of linear-cyclic polymers containing piperidine rings in the primary macromolecule chain. The authors

Card 2/3

ACCESSION NR: AF4020516

are deeply grateful to A. V. Mushagyan who took the infra-red spectra". Orig. art. has: 2 tables.

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR (Institute of Organic Chemistry, AN ArmSSR)

SUBMITTED: 18Jun65

DATE ACQ: 31Mar64

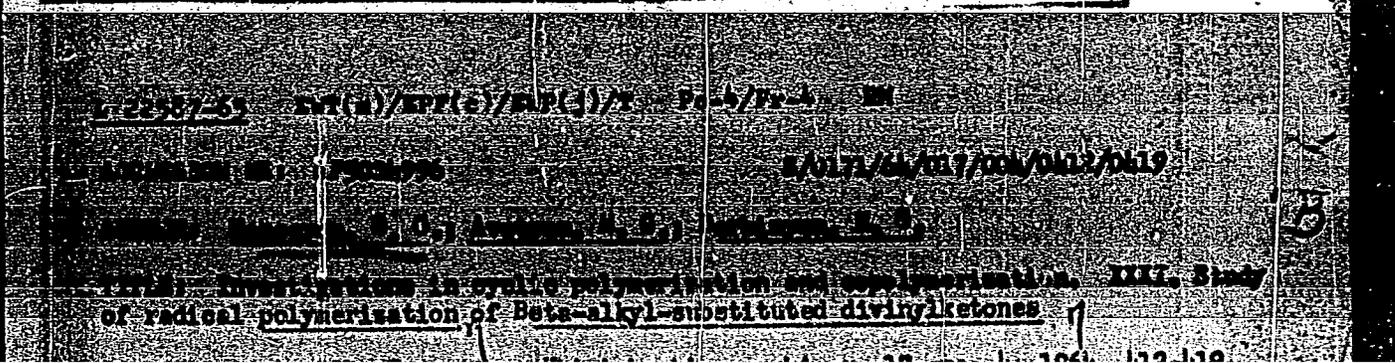
ENCL: 00

SUB CODE: CH

NO. REF. SOV: 002

OTHER: 004

Cont 3/3



SOURCE: AN ArmSSR, Investiya, Khimicheskoye nauki, V. 17, No. 4, 1968, 412-417

TOPIC TAGS: polymerization, ketone

Abstract: Polymerization of  $\alpha$ -ethyldivinylketone,  $\beta$ -n-propyldivinylketone,  $\alpha$ ,  $\beta$ -methyl ethyldivinylketone,  $\beta$ ,  $\beta$ -diethyldivinylketone,  $\beta$ ,  $\beta$ -penta-methylenedivinylketone, and  $\alpha$ ,  $\beta$ -methylterbutyldivinylketone in bulk and in solutions containing benzoyl peroxide and azobutyric acid dinitrile was studied. It was found that the total polymerization rate of substituted divinylketones is proportional to the monomer concentration to the first power and the square root of the initiator concentration. The activation energies of polymerization of  $\beta$ ,  $\beta$ -methyl ethyldivinylketone and  $\beta$ ,  $\beta$ -penta-methylenedivinylketone are 25.25 and 28.54 kcal/mole, respectively. Polymerization

L 22587-65			
ACCESSION NR: AP5004996			
ASSOCIATION: Institut organicheskoy khimii AN ArASSR (Institute of Organic Chemistry, AN ArASSR)			
SUBMITTED: 036-063	ENCL: 00	SUB CODE: 00, 00	
NO REF SOV: 001	OTHER: 001	JPRS	

<p>12586-65 (EWT(m)/EPF(c)/EDR/ENP(s))</p>	<p>Pc-4/Pr-4/Ps-1 RPL WW/RM</p>
<p>ACCESSION NR: AP5001997</p>	<p>S/011/61/017/001/0120/0127</p>
<p>AUTHOR: Matsuyan, S. B., Voskanyan, M. G.</p>	<p>Gevorkyan, G. Ts., Gholakyan, A. A.</p>
<p>ABSTRACT: Investigations in 70°C polymerization and copolymerization of styrene with acrylonitrile, methyl methacrylate, and vinyl acetate. The effect of the concentration of the initiator and the monomers on the rate of polymerization and the composition of the copolymer is studied. It is shown that the copolymerization of styrene with acrylonitrile and methyl methacrylate is more favorable than with vinyl acetate. The results are compared with the data of other authors.</p>	<p>Journal of Polymer Science, Part A: Polymer Chemistry, Vol. 17, No. 4, 1979, pp. 120-127</p>

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...CONSTRAINTS OF THESE MONOMERIC SYSTEMS WERE

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ADDRESS: NIKI AP5001997

determined. It was found that in the presence of a divinylbutyral cyclic radical these monomers are capable of not only being copolymerized but also

polymerized. Orig. art. has 3 graphs and 6 tables.

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR (Institute of Organic Chemistry, AN ArmSSR)

SUBMITTED: 20Sep63

ENGL: 00

SUB CODE: 00, 00

NO REF SOV: 005

OTHER: 001

JPRS

Card 2/2

24  
23  
B

AUTORS: Katsyan, E. G.; Sakhym, A. A.

TITLE: Research in the field of cyclic polymerization and copolymerization.  
XXXIV. The study of the polymerization of aromatic vinyl ethynylcarbinols

SOURCE: AN ARSSR. Izvestiya. Khimicheskiye nauki, v. 17, no. 6, 1964, 676-681

TOPIC TAGS: cyclic polymerization; copolymerization

ABSTRACT: The radical polymerization of a series of secondary aromatic vinyl-  
ethynylcarbinols was investigated with phenyl-, 2-methylphenyl-, 3-methylphenyl-,  
4-methylphenyl-, 2,4,6-trimethylphenyl-

vinylethynylcarbinols are inferior to their aliphatic analogs with respect to their capacity for polymerization while adhering to the same patterns for the polymerization mechanism. Chemical and spectroscopic investigation of the polymers which were obtained provides a basis for assuming that the radical polymerization of aromatic vinylethynylcarbinols occurs according to a cyclic mechanism previously suggested by the authors for aliphatic vinylethynylcarbinols. Orig. art. has: 3 tables, 2 figures, 1 formula.

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR (Institute of Organic Chemistry, AN ArmSSR)

AKOPYAN, L.A.; AVETYAN, M.G.; MATSOYAN, S.G.

Synthesis of glycidyl ethers of vinyl ethynyl carbinols. Izv. AN  
Arm. SSR. Khim. nauki 17 no. 6: 703-705 '64.

(MIRA 18:6)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

POGOSYAN, S.M.; ZHAMKUCHYAN, G.A.; MATINYAN, S.G.

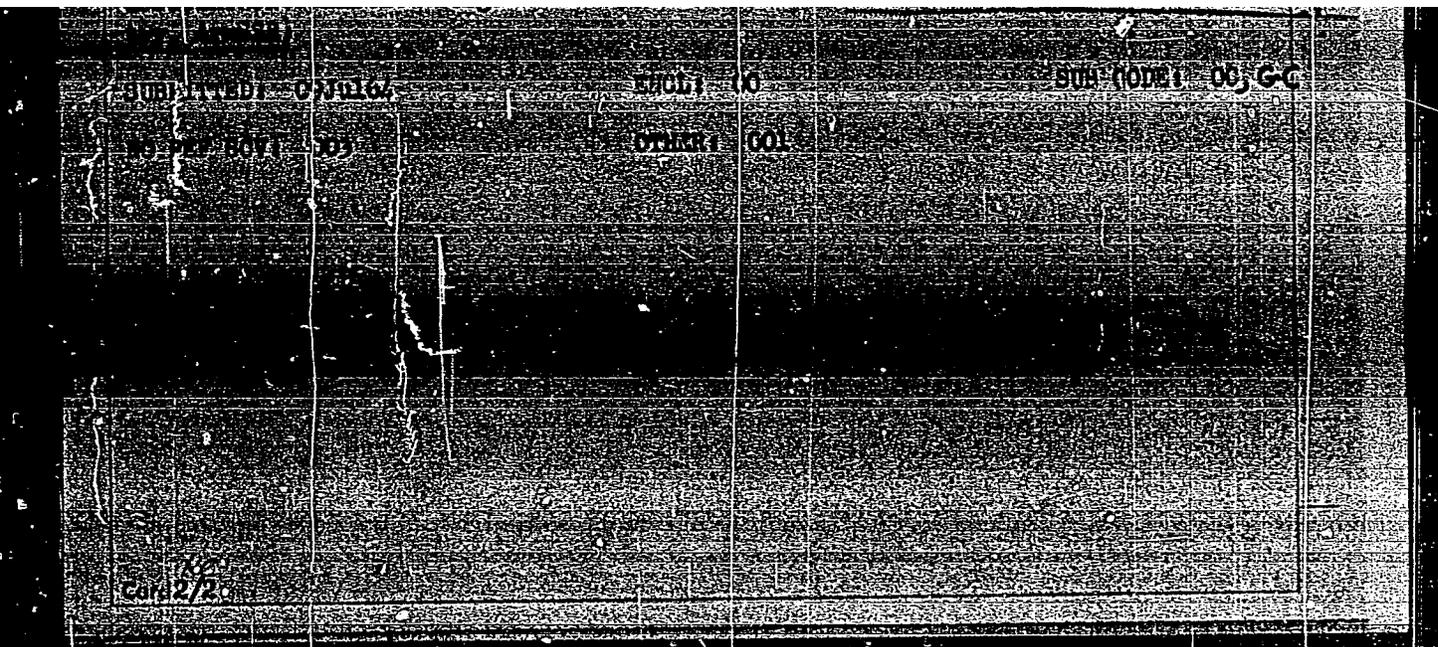
Polymerization of  $\alpha$ -vinylbenz in acid esters. *Vysokomol. Soedin.*  
7 no.4:707-709 Ap 1965. MIRA 1861

1. Institut organicheskoy khimii AN Armyanskoy SSR.

63037-55	REF (6)/SER (4)/SER (M)/A	PC-4/Pr-4	JAN/1965
ACCESSION NR: AP5013055			UR/0190/65/001/005/0828/0830 66.095.26+678.744
AUTHORS: Pogosyan, G. M.; Zhamkochyan, G. A.; Matsoyan, S. G.			27 28 B
TITLE: Polymerization of 4-vinylbenzamides			
SOURCE: Vysokomolekulyarnyye soedineniya, v. 7, no. 5, 1965, 828-830			
TOPIC TAGS: polymer, resin, amide, benzoyl peroxide, catalyst			

ABSTRACT: This paper is an extension of the work reported previously by the authors (J. Polym. Sci., Polym. Chem. Ed., 7, 197, 1969). The polymerization of N-methylamide (A), N-ethylamide (B), N-nonylamide (C), piperidylamide (D), and morphylamide (E) of 4-vinylbenzoic acid in the presence of benzoyl peroxide and azobisisobutyronitrile in bulk and in solution was investigated. The polymerization was carried out at 80°C. Viscosities of polymers at 20°C obtained in bulk, in dimethylformamide and absolute ethyl alcohol were determined. The softening point of the polymers was determined by the capillary method. It was found that the rate of polymerization is faster in the presence of azobisisobutyronitrile than in the presence of benzoyl peroxide and decreases in the order A, E, B, D, C. (orig. art. has 2 tables and 1 graph.)





MATSOYAN, S.G.; MORLYAN, N.M.; KINOYAN, F.S.

Kinetics of tertiary vinylalcohol polymerization. *Vysokomol. soed.* 7 no.7:1159-1164 1965. (MIRA 18:8)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

MATSOYAN, S.G.; SAAKYAN, A. A.

Cyclic polymerization and copolymerization. Part 35: Polymerization of alicyclic vinyl ethynyl carbinols. Izv. AN Arm.SSR. Khim.nauki 18 no.1:60-67 '65. (MIRA 18:5)

1. Institut organichesky khimii AN Armyanskoy SSR.

MATSOYAN, S.G.; MORLYAN, N.M.; SAAKYAN, A.A.

Cyclic polymerization and copolymerization. Part 1: Radical  
polymerization of some vinylacetylene compounds. Izv. AN Arm.  
SSR. Khim.nauki 18 no.1:88-95 '65.

(MIRA 18:5)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

L 37498-69 EPL(15)/EPF(6)/EPB/RWP(3)/1 Pc-4/Pr-4/Pb-4 RPL WH/RM

ACCESSION NR: AP5015947

UR/0171/65/018/002/0178/0185 31

541.64 : 542.952.8 28  
B

AUTHOR: Matsuyan, S.G., Cholakyan, A.A., Pogosyan, G.M.

TITLE: Studies in the field of cyclic polymerization and copolymerization. Part 37. Synthesis and study of the capacity of certain 1,6-dienes for cyclic polymerization 7

SOURCE: AN ArmSSR, Izvestiya. Khimicheskiye nauki, v. 18, no. 2, 1965, 178-185

**TOPIC TAGS:** cyclic polymerization, cyclic copolymerization, diene polymerization, cyclic polyolefin

**ABSTRACT:** In order to obtain new polymers with carbocyclic and heterocyclic links in their chains, the authors synthesized some 1,6-dienes and studied their capacity for cyclic polymerization. The following 1,6-dienes were synthesized: bis-2-methallyl-malonic and bis-2-methallylcynoacetic ester, bis-2-methallylcynoacetic acid, bis-2-methallylacetonitrile, bis-2-chloroallyl ether, bis-2-chloroallyl sulfide, bis-2-chloroallyl sulfone, allyl ether, allyl sulfide, allyl acrylate, allyl methacrylate, N-allylacrylamide, and N-allylmethacrylamide. The polymerization was carried out in bulk and in solution with the aid of the radical initiators benzoyl peroxide and azobisisobutyronitrile. It was found that the tendency of symmetrical 1,6-dienes to

...of symmetrical 1, 2-dienes to

1-57498-65

ACCESSION NR: AP5015847

3

undergo radical polymerization depends on the number and position of the polar

and 1 formula.

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR (Institute of Organic Chemistry, AN Arm SSR)

SUBMITTED: 06Jul64

ENCL: 00

SUB CODE: CC

NO REF SOV: 000

OTHER: 007

1-429-55 DTI(a)/EFP(c)/RNP(j) RM  
ACCESSION NR: AP6023918

UR/0171/65/018/004/0418/0420  
542.951.3

25  
21  
B

AUTHOR: Pogosyan, G. M.; Zhamkochyan, G. A.; Matsoyan, S. G.

TITLE: Esters of 4-vinylbenzoic acid

SOURCE: AN ARABER. Investiya. Khimicheskoye nauki, v. 18, no. 4, 1965, 418-420

TOPIC TAGS: ester, vinylbenzoic acid, esterification

ABSTRACT: Esters of 4-vinylbenzoic acid were synthesized by the action of thionyl chloride on 4-vinylbenzoic acid followed by the reaction of the acid chloride thus obtained with the corresponding alcohols in the presence of triethylamine in a solution of absolute ether:



Methyl, ethyl, propyl, isopropyl, butyl, isobutyl, hexyl,  $\beta$ -dimethylamino-  
Card 1/2

L 4149-66

ACCESSION NR: AP6023918

ethyl, and  $\beta$ -diethylaminoethyl esters were thus prepared. All the compounds obtained except the methyl ester are colorless liquids with a pleasant odor. Polymerization experiments showed that the synthesized esters are capable of polymerizing both in the presence and absence of radical initiators. The esters, particularly amino esters, may be of interest for the synthesis of physiologically active polymers. The experimental procedure employed is described. Orig. art. has: 1 table. 4

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR (Institute of Organic Chemistry, AN ArmSSR)

SUBMITTED: 23 June 66

ENCL: 00

SUB CODE: OC, CC

NO REF SOV: 001

OTHER: 002

*mlr*  
Card 2/2

AVETYAN, N.G.; NIKOGOSYAN, L.L.; MATSOYAN, S.G.

Addition of dichlorocarbene to substituted divinylacetylene  
hydrocarbons. Izv. AN Arm. SSR. Khim. nauki 18 no. 4: 427-428 '66.  
(MIRA 18:14)

1. Institut organicheskoy khimii AN Armyanskoy SSR. Submitted  
April 28, 1965.

1-13363-66 ENT(m)/EWP(j)/Z RM

ACC NO: AF6003330

SOURCE CODE: UR/0074/66/035/001/0070/0092

28

AUTHOR: Petrov, S. G.

ORG: Institute of Organic Chemistry AN ArmSSR (Institut organicheskoy khimii AN ArmSSR) B

TITLE: Synthesis of polymers by the method of cyclic polymerization

SOURCE: Uspekhi khimii, v. 35, no. 1, 1966, 70-92 744.55

TOPIC TAGS: polymerization, conjugated polymer, heterocyclic base compound, cyclic group, copolymer

ABSTRACT: A review of 170 Communist World and Western studies on the synthesis of polymers by cyclic polymerization is presented under the following headings: I. Introduction. II. Synthesis of carbocyclic polymers: (1) Polymerization of conjugated dienes; (2) Polymerization of unsaturated other types of compounds. III. Synthesis of heterocyclic polymers: (1) Polymerization of nonconjugated diene systems containing heterocyclic atoms; (2) Polymerization of other types of compounds. IV. Synthesis of cyclic copolymers. Orig. art. has: 57 figures and 2 tables. [ATD PRESS: 4171-2]

SUB CODE: 07 / SYM DATE: none / ORIG REF: 081 / OTH REF: 089

Card 1/1

UDC: 547.5:541.64:542.952.6

**MATSOYAN, S.G.; MORLYAN, N.M.**

**Cyclic polymerisation and copolymerization, Part 29:  
Radical polymerisation of aliphatic vinylthynylcarbinols.  
Izv.AN Arm.SSR.Khim.nauki 17 no. 3:319-328 '64.**

**Cyclic polymerisation and copolymerization, Part 30: Radical  
polymerisation of ethers and esters of vinylthynylcarbinols.  
Ibid.:329-338 (MIRA 17:7)**

**1. Institut organicheskoy khimii AN Armyanskoy SSR.**

MATSPANOVA, O. D.

"Investigation of the Operation of United Maternity Homes and Consultation  
offices for Women in the RSFSR," Akusher. i Ginekol No. 3, 1949.  
Obstetrical and Gynecological Aid, Min. of Health RSFSR. Hon. Dr. RSFSR. -c1949.-"

MATSPANOVA, O. D.

Mbr., Moscow Province Scientific Research Institute of Obstetrics and Gynecology

"Some remarks on the therapeutic and prophylactic regimen in the obstetrical department." Akush. i gin. no.4:26-31 J1-Ag, 1952

Honored Physician

MATSPANOVA, O. D.

Direktor Moskovskogo oblastnogo nauchnoissledovatel'skogo instituta akusherstva  
i ginekologii

Akush. i gin., 1952, no.5, p. 14

**MATSPONOVA, O.D.**

Certain considerations on the therapeutico-prophylactic regimen in  
obstetric wards. Akush. gin., Moskva no.4:26-31 July-Aug 1952.

(GML 23:2)

1. Honored Physician **RSFSR**. 2. Of Moscow Oblast Scientific-Research  
Institute of Obstetrics and Gynecology (Scientific Supervisor --  
Prof. V. P. Nikhaylov).

**MATSPANOVA, O.D.**

~~Preventive examination of the rural population; data of the Ministry of Public Health of the R.S.F.S.R. Akush.i gin. no.2:25-30 Mr-Ap '55.~~ (MLRá 8:7)

(RURAL CONDITIONS,

syn. prev. measures in Russia)

(GYNECOLOGICAL DISEASES, prevention and control,  
in Russia, in rural areas)

MATSPANOVA, O. D., Cand Med Sci -- (diss) "Prophylactic Gynecological Examination<sup>s</sup> of Women in <sup>the</sup> RSFSR for 1946-1955." Mos, 1957. 20 pp (Second Mos State Med Inst im N. I. Pirogov), 200 copies (KL, 48-57, 110)

- 72 -

MATSPANOVA, O.D., kand. med. nauk; LANKOVITS, A.V., prof.;  
KRASOVSKIY, Ye.B., doktor med. nauk, red.; LIENZON,  
L.L., kand. med.nauk, red.

[Authors abstracts of scientific papers completed in 1961]  
Avtoreferaty nauchnykh rabot, vpolnennykh v 1961 g. Red.  
koll.: O.D.Matspanova i dr. Moskva, 1962. 118 p.

(MIRA 16:11)

1. Moscow. (Province) Oblastnoy nauchno-issledovatel'skiy in-  
stitut akusherstva i ginekologii. 2. Direktor Moskovskogo  
oblastnogo nauchno-issledovatel'skogo instituta akusherstva i  
ginekologii (for Matspanova). 3. Zamestitel' direktora po na-  
uchnoy chasti Moskovskogo oblastnogo nauchno-issledovatel'sko-  
go instituta akusherstva i ginekologii (for Lankovits).  
(OBSTETRICS) (GYNECOLOGY) (PEDIATRICS)

EXCERPTA MEDICA Sec 7 Vol 13/6 Pediatrics June 59

1349. CHANGES IN THE NERVOUS SYSTEM OF THE RESPIRATORY PASSAGES OF CHILDREN WITH WHOOPING COUGH (Russian text) - Matsui V.I. - PEDIAT. AKUSH. I GINEK. 1957. 3 (24-27)

On examination of the intramural nervous system of the respiratory passages of 14 children with whooping cough, an increased number of sensory nerve endings in the smooth muscle and a dystrophy of the central neuron, going on to destruction of the nervous tissue were observed. In all instances, little differentiated nerve cells lacking processes showed slight changes. Nerve cells with processes were in a state of disintegration. 'Young' nerve cells of small size impregnated with silver moderately well; sometimes a partial chromatolysis occurred. The number of processes of the nerve cells was increased, surrounding the bodies of neurons in the form of 'baskets'. There were 'bullet-phenomena' to be observed on the dendrites indicating axonal lesions. Great damage was noted in the myelin fibres, which showed thickenings of various degrees along their length, and the whole structure of the fibres was destroyed. The sensory endings were dystrophic; at places destruction was noted, as evidenced by break-up of fibres and lysis of axis cylinders. Silver impregnation of various portions of the fibres was not uniform. Dystrophic and destructive changes were noted also in the terminal and pre-terminal structures; vacuolization and granular degeneration were frequently observed. (S)

BATUYEVA, Tat'yana Mikhaylovna; SEMENKOVA, Tat'yana Georgiyevna;  
MATSUK, R.V., red.; YEZHOVA, L.L., tekhn. red.

[Economic basis of the collective farm system] Ekonomicheskie osnovy kolxoznogo stroia; uchebno-metodicheskoe posobie dlia prepodavatelei politicheskoi ekonomii srednikh spetsial'nykh uchebnykh zavedenii. Moskva, Vysshaya shkola, 1962. 64 p.  
(MIRA 16:6)

(Collective farms--Management)

LEBSEV, Viktor Georgiyevich; MATSUK, R.V., red.; NAUMOV, K.M.,  
tekhn. red.

[Toward the communist form of industrial management] Na putiakh  
k kommunisticheskomu upravleniyu proizvodstvom. Moskva, Izd-vo  
VPSH i AON pri TsK KPSS, 1963. 63 p. (MIRA 16:6)  
(Industrial management)

LEBEDEV, Viktor Georgiyevich; MATSUK, R.V., red.; NAUMOV, K.M.,  
tekh. red.

[On the path to the communist management of production]  
Na putiakh k kommunisticheskomu upravleniu proizvodstva.  
Moskva, Izd-vo VPSH i AON pri TsK KOSS, 1963. 63 p.  
(MIRA 16:7)

(Industrial management)

MANTSEV, V.I.; MATSUK, R.V., red.; MARTYNOVA, M.N., tekhn. red.

[Monopoly profit and monopoly price] Monopol'naya pribyl'  
i monopol'naya tsena. Moskva, Izd-vo VPSH i AON pri TsK  
KPSS, 1963. 95 p. (MIRA 16:9)  
(United States--Trusts, Industrial)  
(United States--Profit)

SHVYRKOV, Vladislav Vasil'yevich. Prinsipal'noe uchastie DRUZHININ, N.K.,  
prof.; MATSUK, R.V., red.; BAZLOVA, Ye.M., mlad. red.

[Regularities in the consumption of industrial and food com-  
modities] Zakonomernosti potrebleniia promyshlennykh i pro-  
dovol'stvennykh tovarov. Moskva, Ekonomika, 1965. 280 p.  
(MIRA 18:9)

MOROZOV, Vasiliy Aleksandrovich; MATSUK, R.V., red.

[Disarmament and the problem of the capitalist market]  
Razoruzhenie i problema kapitalisticheskogo rynka. Mo-  
skva, Izd-vo "Mysl'," 1964., 253 p. (MIRA 17:11)

**MATSUI, V.G., insh.**

**"Technical specifications for artificial freezing of grounds."**  
Reviewed by V.G. Matsui. Transp. stroi. 8 no.3 Mr '58.

(MIRA 11:4)

(Frozen ground) (Soil mechanics)

*MATSUK, Y. P.*

ARUFYUNYAN, K.S., inzhener; MATSUK, Y. P., inzhener; MINAKOV, D.D., inzhener.

Investigation of crambe seeds and oil. Masl.-zhir.prom. 17 no.114-6  
B 192. (MIRA 199)

1. Krasnodarskiy institut masloshchepnoy promyshlennosti. 2. Vsesoyuznyy  
nauchno-issledovatel'skiy institut zhirov.  
(Crambe; (Oil's and fats)

GOLDOVSKIY, A.M., doktor tekhnicheskikh nauk, professor; MATSUK, Yu.P., inzhener; SECHERRAK, P.A.

Studying the operation of screw presses; duration of the pressing action in screw presses. Masl.-shir.prom. 18 no.5:4-6 My '53. (MLBA 6:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut shirov.  
(Power presses) (Oils and fats)

GOLDOVSKIY, A.M., doktor tekhnicheskikh nauk; MATSUK, Yu.P., inzhener.

Change in the volume of pressed material in screw presses. Masl.-zhir.  
prom. 18 no.6:10-11 Je '53. (MLRA 6:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Extraction apparatus)

MATSUK, Yu.P., inzhener; TVERDOVSKIY, G.I., inzhener; KREYSINA, R.A.;  
PUSHKAREV, G.P., inzhener; SAVCHENKO, N.Ya., inzhener.

Cooling the horizontal barrels of screw presses. Masl.-shir.  
prom.21 no.2:9-11 '56. (MLRA 9:7)

1.Sredneaziatskiy filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta shirov (for Matsuk, Tverdevskiy, Kreysina).2.Mananganskiy  
maslosavod (for Pushkarev, Savchenko).  
(Oil industries--Equipment and supplies)

MATSUK, Yu. P. inzhener.

Temperature of the barrel of the FP, KP, MP screw presses. Masl.  
-shir.prom.23 no.1:18-20 '57. (MLEA 10:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut shirov.  
(Oil industries--Equipment and supplies)

MATSUK, Yu.P., inzhener; KURDYUMOV, V.N., inzhener; MALYY, G.D., inzhener;  
BEZUGLOV, M.I., inzhener.

Mechanical removal of solvent from oilseed meal. Masl.-zhir. prom.  
23 no.3:6-7 '57. (MIRA 10:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for Matsuk).
2. Lenzhirkombinat (for Kurdyumov). 3. Poltavskiy zhirovoy kombinat (for Malyy).
4. Krasnodarskiy maslozhirovoy kombinat (for Bezuglov).  
(Oils and fats)

MATSUK, Yu.P., inzhener; VETROV, B.Ya., inzhener.

Using all for cooling abrrrel cylinders of EP screw presses.  
Masl.-shir.prom. 23 no.6:13-14 '57. (MIRA 10:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut shirov (for Matsuk).
2. Nevinnomyasskiy maslozavod (for Vetrov).  
(Oil industries--Equipment and supplies)

*11-15-57*  
MATSUK, Yu.P., inzh.; KHRISTYUK, Yu.T., inzh.

Processing peanuts for the production of feed meal. Masl.-zhir. prom.  
23 no.8:38-39 '57. (MIRA 10:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Peanuts) (Feeding and feeding stuffs)

**MATSUK, Yu.P., insh.**

Spray distillation of miscella. Masl.-shir.prom. 25 no.1:44-45  
'59. (MIRA 12:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut shirov.  
(Distillation apparatus) (Oils and fats)

BEZUGLOV, I.Ye.; KURDYUMOV, V.N., inzh.; V rabote prinimali uchastiye:  
GABRILENKO, I.V.; GRABOVSKIY, I.I.; NESHCHADIM, A.G.; BELOBORODOV,  
V.V.; VISHNEPOL'SKAYA, F.A.; MATSUK, Yu.P.; GAYTSKHOKI, N.I.;  
USACHEV, A.S.; ABKINA, N.N.; RUMYANTSEVA, A.G.; KOSHELEV, A.P.;  
GRIGOR'YEV, F.L.; LUKASHEVICH, A.M.; STYAZHKINA, A.G.; MIKHAYLOVICH,  
A.N.; YEDEMSKIY, P.M.; MASLOV, P.V.; KUDRYASHEVA, Z.P.; PROSMUSHKIN,  
R.M.; SHTAL'BERG, V.A.; BOYTSOV, N.I.

Operational experience with a newly introduced oil-extraction line  
equipped with the DS-70 belt-conveyer extractor. Masl.-zhir.prom.  
26 no.3:29-31 Mr '60. (MIRA 13:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut shirov (for  
Bezuglov, Gabrilenko, Grabovskiy, Neshchadim, Beloborodov,  
Vishnepol'skaya, Matsuk and Gaytskhoki). 2. Leningradskiy  
shirovoy kombinat (for Kurdyumov, Usachev, Abkina, Rumyantseva,  
Koshelev, Grigor'yev, Lukashevich, Styashkina, Mikhaylovich,  
Yedemskiy, Maslov, Kudryasheva, Prosmushkin). 3. Leningradskoye  
otdeleniye tresta "Prodmontash" (for Shtal'berg and Boytsov).  
(Leningrad--oils and fats)  
(Extraction apparatus)

MATSUK, Yu.P., inzh.

Processing of oil cake brought to the Georgiyevsk Oil Extraction  
Plant. Masl.-zhir.prom. 26 no.11:43-45 # '69. (MIR: 13:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for  
Matsuk). 2. Georgiyevskiy masloekstraktsionnyy zavod (for pro-  
shchenko).

(Georgiyevsk--Sunflower seed meal)

MATSUK, Yu.P., inzh.

Relation between the husk content of a kernel and oil losses  
during the processing of sunflower seeds. Masl.-shir.prom. 27  
no.1:7-10 Ja '61. (MIRA 14:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut shirov.  
(Sunflower seed)

MATSUK, Yu.P., inzh.

Manufacture of palm oil and palm kernel oil in Indonesia. Masl.-  
zhir.prom. 28 no.3:43-45 Mr '62. (MIRA 15:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Indonesia--Palm oil)

MATSUK, Yu.P., inzh.; NESHCHADIM, A.G., inzh.; ZAMORUYEVA, T.A., inzh.

Characteristics of the movement of the solvent in the screw  
extractor. Masl.-zhir.prom. 28 no.9:6-8 S '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for  
Matsuk). 2. Vsesoyuznyy zaochnyy institut pishchevoy promyshlennosti  
(for Neshchadim). 3. Leningradskiy khimiko-farmatsevticheskiy  
institut (for Zamoruyeva).

(Extraction apparatus) (Oils and fats)

MATSUK, Yu.P., inzh.

Production of copra and utilization of coconut and palm oil in  
Indonesia. Masl.-zhir. prom. 28 no.10:38-40 0 '62. (MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.

GAVRILENKO, I.V., kand.tekhn.nauk; MATSUK, Yu.P., kand.tekhn.nauk;  
KUZNETSOVA, N.N., inzh.; BOROVY, L.YE., inzh.; Prinsipali  
uchastnye: SAUSHKINA, L.V.; IVANOVA V.F.; CHEKANOVA, S.V.;  
TITOV, A.V.; DEMIN, I.V.

Conditioning of oil cakes. Masl.-zhir.prom. 30 no.2:24-28 F  
'64. (MIRA 17:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for  
Gavrilenko, Matsuk, Kuznetsova, Saushkina, Ivanova). 2. Gosudarstvennyy  
proyektnyy institut "Giprozhir" (for Borovoy, Titov, Demin).

MATSUKA, A G.

MOLDAVSKAYA, V.D.; TISHCHENKO, O.D.; USTINOV, A.A.; MOSHENSKAYA, F.A.; ZALKIND, L.B.;  
NIKHAJLOV, A.A.; TSUKANOV, A.A.; MATSUKA, A.G.

Eradication of malaria in a city in Southern Ukraine. Med. parasit.,  
Moskva no.3:232-237 May-June 1953. (GLML 25:1)

1. Of the Ukrainian Institute of Malaria and Medical Parasitology  
(Director -- I. A. Demchenko), Stalino and Zhdanov Anti-Malarial Stations.

MATSUKA, G. KH., GULYY, M. F., and DEGTYAR, R. G. (USSR)

"The Mechanism of Certain Physiological Functions of Insulin."

Report presented at the 5th International Biochemistry Congress,  
Moscow, 10-16 Aug 1961

MATSUKA, G.Kh. [Matsuka, H.Kh.]

Chamber for work with radioactive carbon. Ukr. biokhim. zhur. 33  
no.1:111-113 '61. (MIRA 14:3)

1. Institut biokhimi Akademii nauk Ukrainskoy SSR, Kiyev.  
(RADIOBIOLOGICAL RESEARCH)

GULYY, M.F., akademik; DEGTYAR', R.; MATSUKA, G.Kh.

Mechanism of some insulin functions in metabolism. Dokl. AN SSSR  
140 no.6:1448-1451 0 '61. (MIRA 14:11)

1. AN USSR (for Gulyy).  
(INSULIN) (METABOLISM, DISORDERS OF)

MAISUKA, G.Kh. [Maisuka, H.Kh.]

Interrelation between the disturbance of the tricarboxylic acid  
oxidation cycle in the animal organism and the development of  
diabetes-like hyperglycemia. Ukr.biokhim.zhur. 12: 113-119  
'62.

1. Institute of Biochemistry of the Academy of Sciences of the  
Ukrainian S.S.R., Kiev.



MAKSIMOVA, Ye.V.; MATUKHIN, G.R.

Effect of soil salinization on the respiration rate and  
activity of the terminal oxidases of millet leaves. Fiziol.  
rast. 12 no.3:540-542 My-Je '65. (MIRA 18:10)

1. Rostovskiy gosudarstvennyy universitet.

ACC NR: AP7002622 (A,N) SOURCE CODE: UR/0413/66/000/023/0155/0155

INVENTOR: Matsukin, Yu. G.

ORG: None

TITLE: A device for hydraulic stamping. Class 7, No. 150084

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 155

TOPIC TAGS: hydraulic device, metal stamping, explosive forming

ABSTRACT: This Author's Certificate introduces a device for hydraulic stamping by using internal pressure to expand hollow workpieces, e. g. tubular sections. The unit is made in the form of a fluid-filled separable die. This die is simplified by using a cylinder in which the necessary fluid pressure is produced by explosive force acting on a piston.

SUB CODE: 13/ SUBM DATE: 06May61

Card 1/1

MATSUKOV, K.P.

Some results of the observations of the total solar eclipse of  
February 15, 1961. Biul.VAGO no.32:40-43 '62. (MIRA 15:11)  
(Eclipses, Solar--1961)

MATSUKOV, M.P., uchitel khimii

Graphic form of D.I. Mandeleev's periodic table. Khim.v  
shkole 15 no.1:87 Ja-F '60. (MIRA 13:5)

1. Chernigovskaya srednyaya shkola Bashkirkoy ASSR.  
(Visual aids) (Chemistry--Study and teaching)

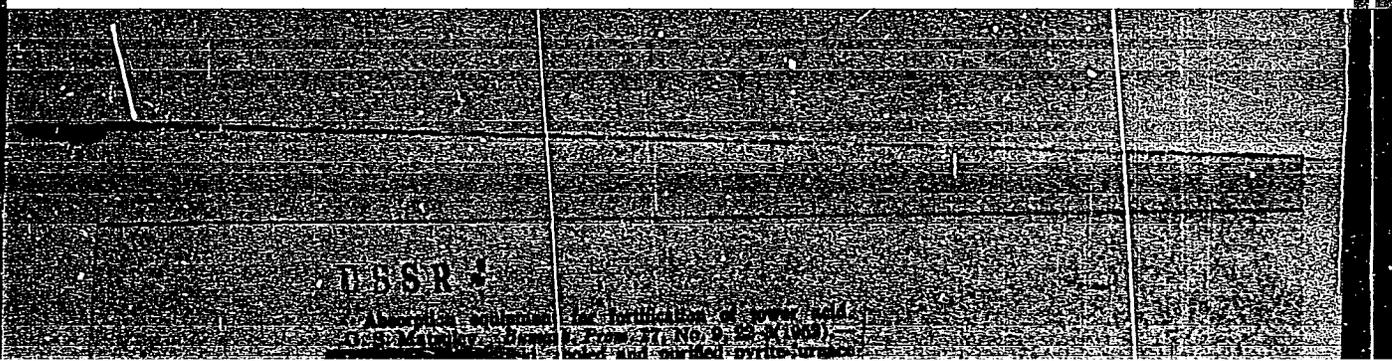
MATSULENKO, Viktor Antonovich, polkovnik; BUBNOV, N.A., polkovnik,  
red.; KRASAVINA, A.M., tekhn.red.

[Korean People's Army] Koreiskaia Narodnaia armia.

Moskva, Voen.isd-vo M-va obor.SSSR, 1959. 124 p.

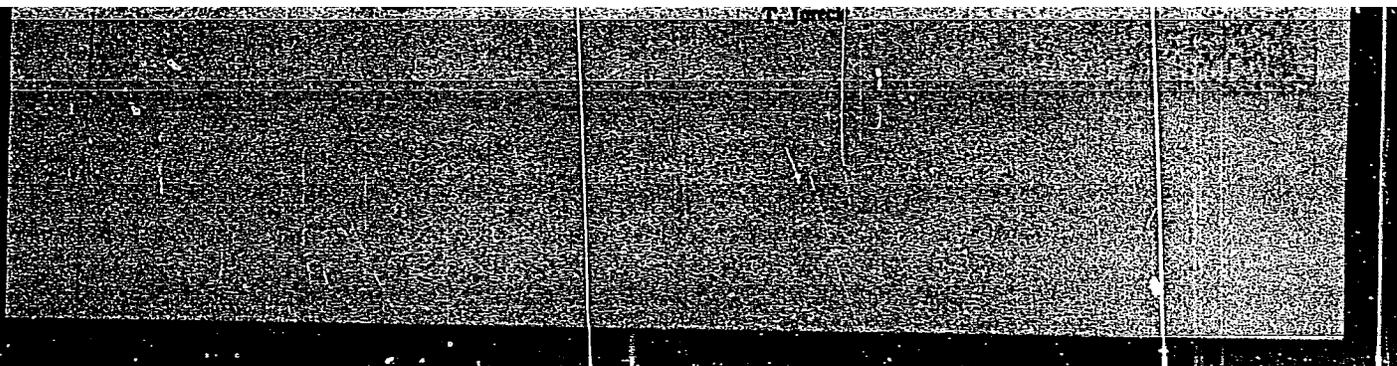
(MIRA 12:6)

(Korea, North--Army)



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**MATSULEV, G.S.**

**Apparatus for the processing of tall oil. Dum.prom. 29 no.6:26-27**  
**Je '54. (MIRA 7:8)**

1. Glavnyy inzhener tsellyuloznogo zavoda "Kekhra".  
(Wood-pulp industry) (Tall oil)

MATSULEV, G.

Manufacture of sulfate pulp from a mixture of coniferous and broadleaf wood. Tr.  
from the Russian. p. 199.

PAPIR A CELULOZA. Vol. 11, no. 9, Sept. 1956

Praha, Czechoslovakia

SOURCE: East European List (EEAL) Library of  
Congress, Vol. 6, No. 1, January 1957

MATSULEV, G.S.

The production of sulfate woodpulp from a mixture of coniferous and deciduous wood. Dum.prom. 31 no.5:16-17 My '56. (MLRA 9:8)

1. Glavnyy inzhener tsellyuloznogo zavoda "Kekhra".  
(Woodpulp)

MATSULEV, G.S., inzhener.

Starting the operation of a vacuum-evaporator station. Bum.prom.  
31 no.9:14-15 S '56. (MLRA 9:11)

1. Tsellyulosnyy zavod "Kekhra".  
(Kehra--Woodpulp industry)